

## THE SUBURBAN CITIZEN.

WASHINGTON, - D. C.

There is nothing very serious in Mr. Carnegie's fear that he may die poor when he says that he can at short notice raise \$200,000,000.

The record of mail matter of all classes in pounds in 1899, carried by the railroads of this country, was the greatest ever known. The mail matter weighed 1,565,636,508 pounds, and had it been reduced to freight, would have required 39,142 cars to transport it.

Every man who embarks in business has a choice between two destinies—obscurity or publicity. If he shall refuse to advertise few persons will know of him, few will buy of him, and his business will sink into desuetude. On the other hand, if he shall advertise persistently and in good taste he will become widely known and the number of his customers will constantly increase, claims the Philadelphia Record. The wiser choice is obvious.

Women in different parts of the country have been burned to death as the result of the use of gasoline for rebovating purposes. Some time, perhaps, it may occur to the authorities that the loss of life and property involved in the use of gasoline is hardly balanced by the saving of money achieved by cleaning a few pairs of dirty kid gloves or scouring last year's undershirts. When that conclusion is reached the sale of gasoline will be forbidden along with other deadly compounds.

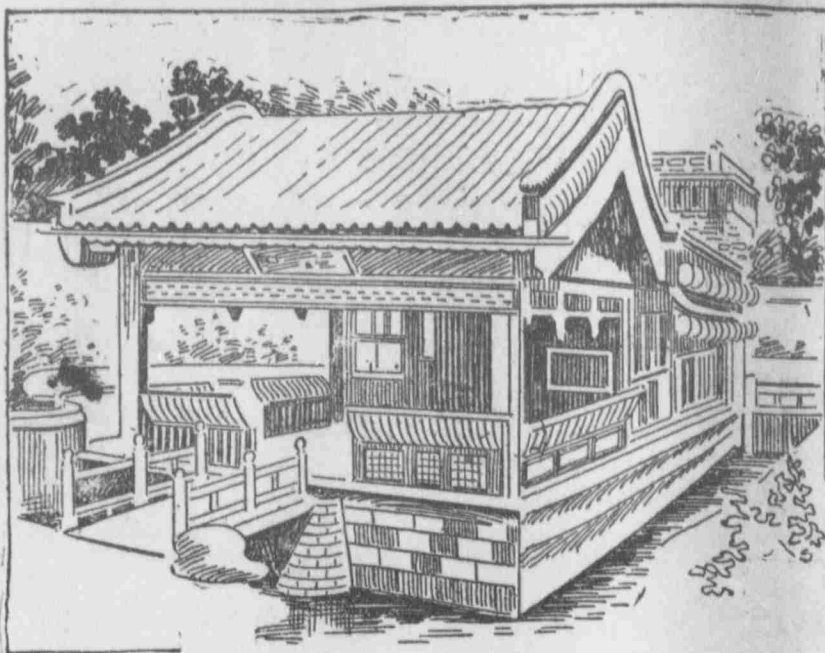
It is a fine thing to develop the body. It is even a finer thing to develop the mind, but the great value comes in the fact that athletics develop the character, and this is what counts. Whatever may be said of university men who have done their duty in the crew, or the eleven or the nine, those men must necessarily have practiced the rugged virtues of courage, resolution, self-dominance, the power of acting in conjunction with others, resolution to act as gentlemen, and often, what is more important to act as men. It is these qualities which make athletes so invaluable, opines Professor Elliot, of Harvard University.

A collection of artists called Yeggs or Yeggsmen is described by the Cincinnati Enquirer. The Yeggs appeared after the disbandment of the Coxey Army in 1894. They work in bands of five or six. Their specialty is cracking safes with nitroglycerine and they are willing to give a really able explosion for the sake of a few dollars. Occasionally they descend to burglary or rise to highway robbery. They call nitroglycerine "soup," "oil" or "grease," an informer a "snitch," a prison a "dump," a newspaper account of their performances a "bawl-out," an apprentice Yegg a "gay cat." Will the philologists be good enough to give the origin of the term "Yeggs?"

It used to be that the mere fact of having written a book was sufficient to confer distinction upon a man, and to know that a person had got into print was to be conscious of a certain awe for that individual. But now people first ask what kind of a book and what is the nature of the print for which the author is responsible, and they decline to turn their heads to gaze at literary mediocrity. A little pallor in the face and a few ink stains on the fingers are no longer accepted as the indications of greatness, and there seems to be a reaction in favor of sunburn and earth stains. The man who digs and grows brown seems never to be working in vain, but he who grows wan in the production of short-lived literature is a pathetically ineffective figure, remarks the Chicago Tribune.

The man who has done more, perhaps, than any other to humanize warfare is said to be living almost penniless and forgotten in the hospice of Heiden in the Swiss Canton of Appenzel. Dr. Henri Dunant, the founder of the Red Cross Society, by a little work entitled "Un Souvenir de Solferino," in which he vividly described the sufferings of the wounded, and called upon the nations to do something to alleviate the worst horrors of war, by the formation of an international hospital service, first aroused the conscience of Europe to action. The book attracted much attention, and resulted in the Geneva convention of 1864, which established the neutrality of the hospitals and ambulance services, and in the founding of societies in every country, with an international committee at Geneva as a centre.

## View of the Imperial Palace at Pekin.

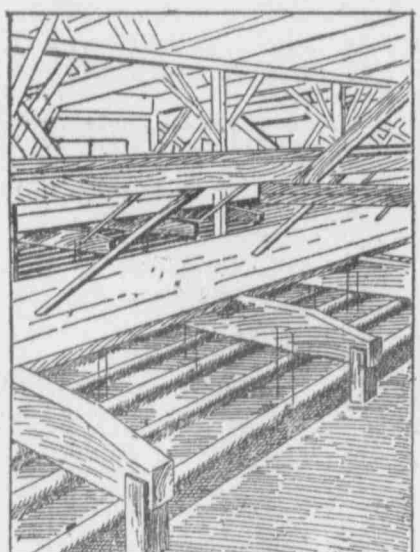


The Chinese imperial palace is the principal architectural feature of the Forbidden City, and is itself more forbidden still. To reach the palace it is necessary to pass three great walls. First, there is the great sixty-foot thick wall of the entire city. Within this is the wall of the Imperial City, six miles in circumference. Within this again is the wall of the Purple Forbidden City, which is sacred to the Emperor and his family. The Purple Forbidden City, or Tze-Kin-Cheng, is nearly square, its sides facing the four points of the compass. Two walls running from north to south divide the space into three parts. The central part contains the principal buildings. To this division the chief entrance is the Wu Mun, or Meridian Gate. Inside this gate is a large court, and running through it an artificial stream, spanned by five bridges of sculptured marble. Another gate at the end of the bridges gives admission to the Palace of Supreme Peace, or Tai-ho-tien, the principal hall of audience. Here the dignitaries of the empire meet and kow-tow to His Majesty. To kow-tow is to kneel three times and knock your forehead on the ground nine times. To the innermost palace no man is admitted. It is here that the emperor lives, surrounded by his uncounted wives.

## The Modern State of the Salt Industry. Interesting Processes.

CONSPICUOUS among the natural resources of the State of Michigan are the forests which cover a considerable extent of its surface and the large deposits of salt which underlie a great portion of its area. In the vicinity of Manistee where the "salt blocks" which form the subject of the present article are located, this deposit consists of a stratum of rock salt, which is from twenty-five to thirty feet in thickness. Salt blocks are usually built in connection with sawmill plants, with a view to making use of the refuse as fuel, and for this reason the city of Manistee has of late years become such a large producer of salt that about half of all this commodity manufactured in the state is made at that point.

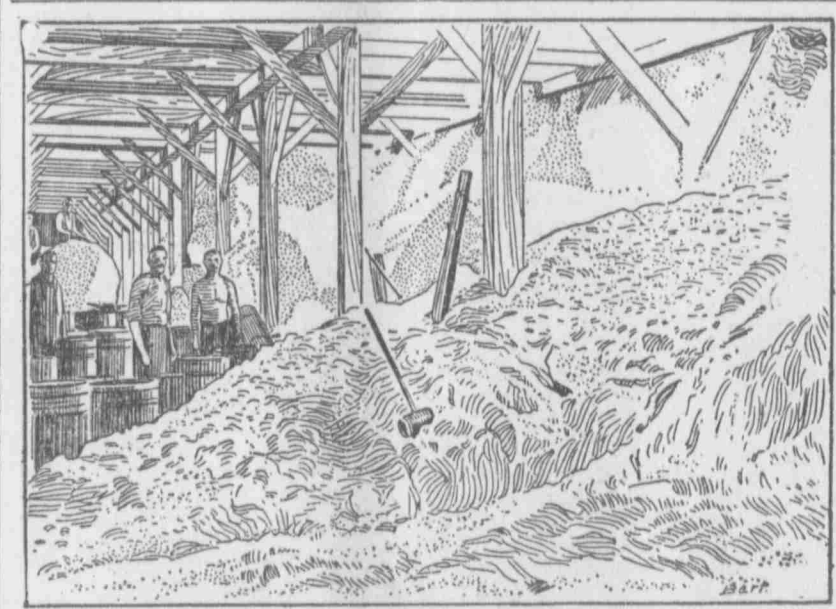
As soon as the site of a well has been selected, a cellar is excavated and planked up and a derrick, usually about eighty feet high, is erected and the work of driving commences. The



TOP VIEW OF A GRAINER, SHOWING THE BRINE, RUNWAY, AND AGITATING PADDLES.

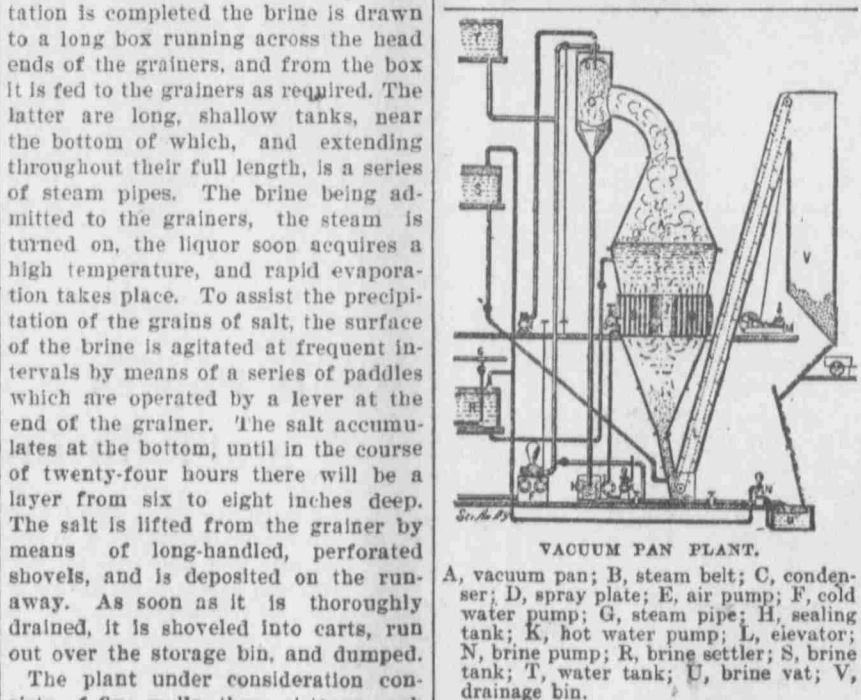
first operation is to sink a section of ten-inch pipe, by means of a sand pump, to a depth of about 400 feet, from which point the well is continued by inserting an eight-inch pipe within the ten-inch pipe and driving it down to the rock formation, the eight-inch pipe extending from the rock up through the ten-inch pipe to the surface of the ground. From the rock formation down, the rock is drilled without any pipe casing, except through such portions as are liable to cave. Salt well No. 5 at Manistee, which is described in the present article, is fairly typical of the wells in this vicinity. The ten-inch pipe reaches

in thickness, reaches to a depth of 1985 feet, making a total depth of 2015 feet. The yield pumped from this well amounts to from 2000 to 2400 barrels of brine in twenty-four hours.



SALT PACKERS AT WORK IN THE STORAGE ROOMS.

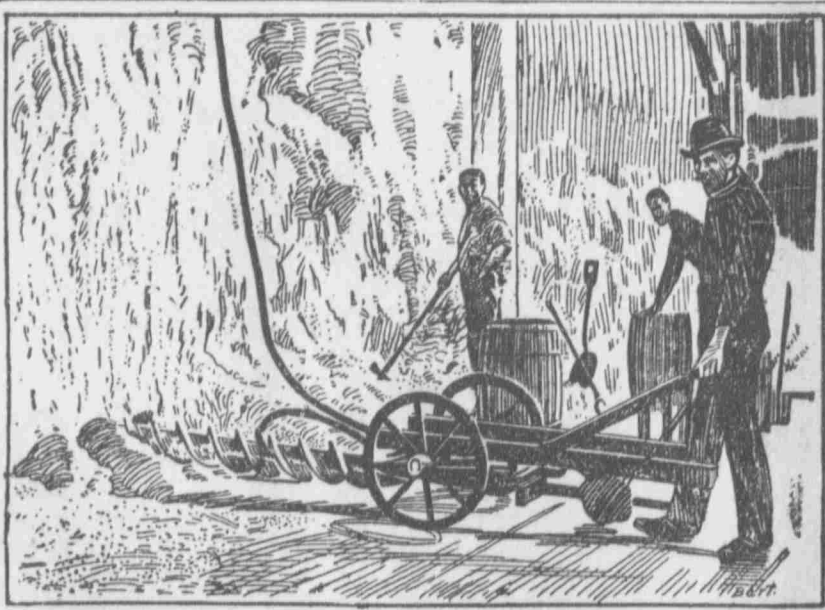
The accompanying diagrams and photographs represent the modern state of the art. As the brine is pumped from the well, it is delivered to the storage cisterns, from which it falls by gravity to the settlers, and from the settlers to the grainers. In the settlers it is heated to a temperature of about 170 degrees Fahrenheit. Upon being allowed to cool, the gypsum, which, if it were not removed, would form a coating on the steam pipes in the grainers, is precipitated, and as soon as precipitation is completed the brine is drawn to a long box running across the head ends of the grainers, and from the box it is fed to the grainers as required. The latter are long, shallow tanks, near the bottom of which, and extending throughout their full length, is a series of steam pipes. The brine being admitted to the grainers, the steam is turned on, the liquor soon acquires a high temperature, and rapid evaporation takes place. To assist the precipitation of the grains of salt, the surface of the brine is agitated at frequent intervals by means of a series of paddles which are operated by a lever at the end of the grainer. The salt accumulates at the bottom, until in the course of twenty-four hours there will be a layer from six to eight inches deep. The salt is lifted from the grainer by means of long-handled, perforated shovels, and is deposited on the runway. As soon as it is thoroughly drained, it is shoveled into carts, run out over the storage bin, and dumped.



VACUUM PAN PLANT.

A, vacuum pan; B, steam belt; C, condenser; D, spray plate; E, air pump; F, cold water pump; G, steam pipe; H, sealing tank; K, hot water pump; L, elevator; N, brine pump; R, brine settler; S, brine tank; T, water tank; U, brine vat; V, drainage bin.

The plant under consideration consists of five wells, three cisterns each eighteen feet wide by 100 feet long and eight feet deep, and six settlers twelve feet wide, 175 feet long, and eight feet deep, capable of holding



COMPRESSED AIR AUGER FOR LOOSENING COMPACT WALL OF SALT.

to a depth of 400 feet, the eight-inch pipe to a depth of 616 feet, where the rock formation is encountered. The bed of rock salt, which is thirty feet

about 24,000 barrels. When these cisterns and settlers are all full, they hold enough brine to manufacture over 10,000 barrels of salt.

Part of the salt manufactured in this plant is made by the vacuum-pan process. In operating the plant the pans are first filled by gravity, after which the gravity supply pipe is closed, and the valve in the pipe connecting with the settlers is opened, the brine being drawn into the pans by the vacuum therein as the evaporation proceeds. The water and the air pumps are inserted, steam is admitted to the steam belt, and the process of manufacturing salt begins. The atmospheric pressure being removed from the surface of the brine, the latter boils violently at a temperature which seldom rises above 150 degrees Fahrenheit. The brine rushes upward through the tubes, and under the rapid evaporation the brine becomes so dense that it can no longer hold the salt in solution. Fine crystal grains are formed, as the liquid circulates through the large three-foot opening in the steam belt, and falling to the bottom of the pan they pass to the foot of the elevator, whence they are taken up and dumped into the drainage bins. After the salt has remained in these bins for a period of sixteen to eighteen hours, it is drawn off into carts, wheeled to the storage bins and dumped. It is customary to use the pans for not longer than twelve consecutive hours, at the end of which period they are emptied, boiled out with fresh water, and cleaned. One of the pans is run during the day and the other during the night, each pan making in a twelve-hour run from 600 to 700 barrels of salt, the combined production being from 1200 to 1400 barrels a day.

In the manufacture of salt it is a recognized necessity that a large quantity must be kept in storage, and for this purpose the salt is dumped into vast storerooms which measure from 200 to 300 feet in length, and the same in width; the amount in store frequently aggregated 400,000 barrels. As these rooms are from sixteen to twenty feet

## A BRIDE WITH PASTED EYELIDS. One of the Odd Marriage Customs in Korea.

In Korea when a girl is married she appears at the wedding ceremony with her face painted a ghastly white, her lips dyed scarlet and her eyelids past-



BRIDE WITH HER EYELIDS PASTED.

ed together, so as to deprive her entirely of sight.

As for the groom, he wears a hired suit, a hat of woven horsehair and a pair of shoes closely resembling "Arctics."

The life of the Korean woman, while secluded, is not as unbearable as that of the women of many other Oriental nations. They are poor, and consequently compelled to work very hard, but as a rule they are well treated by their husbands. They have pretty names, meaning Plum Blossom, Treasure, etc., but after marriage are known only as So-and-So's wife, until they have a son, after which they are known as the mother of that son.

## Has 3,000,000 Silkworm Eggs.

Professor Carl Braun, of Bangor, Me., has 3,000,000 eggs in cold storage in his laboratory. They are the eggs of the silkworm, and were sent to him from Japan. Professor Braun is President of the National Science Association, and long has believed that Eastern Maine is a good place to start a silkworm industry. He is planning to keep the eggs in cold storage until the hatching time comes around and then the sun, warmth and stir will do the rest. He says silkworm culture offers an alluring opportunity to Maine women and girls to branch out into a new line of work. He has made a number of experiments and has found that silk can be "raised" in Eastern Maine.

## In Line With the Majority.

"Why, it's old Diogenes!" cried Skilpinus, as the ancient philosopher, lighted lantern in hand, plodded slowly down the street.

"Hullo, Diog.," cried Patroclus in bantering tones: "found that honest man yet?"

The sage stared up at them. "Honest man?" he grumbled. "I'm not looking for an honest man; I gave that up long ago."

And he turned to hobble away. "Then what are you looking for?" cried young Herclius.

Diogenes paused. "I'm looking for a hired girl," he growled; "ours left yesterday."—Cleveland Plain Dealer.

## Tough on the Joker.

The contributor wrote a joke about a plumber whose bills were always normal. "That," said the editor, rejecting it, "is not a joke; it's a lie."

The contributor tried again with a story of the plumber whose charges left nothing to be desired on the score of size. "That," said the editor, who had suffered, "is not a lie; neither is it a joke."—Scraps.

## Historic Bell of Kennebunk.

The bell which called Kennebunk to celebrate the one hundred and fiftieth anniversary of the Unitarian Church was cast by Paul Revere.—Portland (Me.) Eastern Argus.

## How Boys of 1784 Dressed.

Until the time of the Revolution children dressed precisely like their parents. This goes to explain their painfully mature air in their portraits. In the illustration reproduced of the



boy in calico, we have one of the first attempts at change. Cotton had come into general use and was worn both summer and winter. Figure calico in high colors is the material of this boy's suit.—New York World.

## THE TUNNEL DISEASE.

Curious Affliction of Those Who Delve in Mines and Tunnels.

There is a disease which attacks the laborers in tunnels and mines. It is as old as Egypt, but only within this century has it been traced to a specific parasite. It is a painful and dangerous disease, often resulting in death. A monograph on the subject of this malady, called ankylostomiasis, has just appeared, and, coming as it does, from Hugo F. Goldman, M. D., the official physician in the coal mines of Brenberg, near Oldenburg, Germany, it carries great weight, for it is based upon years of experience and practical treatment of this dread disease.

It attacks not only men, but animals, especially the horses or mules used in the building of tunnels and the operation of mines. It is a disease caught by infection, like typhoid or cholera. It may be contracted in the air or by contact with the germs, which are really the eggs of the little worm, or ankylostoma, as it is called. This name means "hooked mouth," and refers to the six hooked teeth around the mouth of the parasite by which it clings to the interior of the human intestine. It is found not only in the duodenum, but also in the smaller intestines, where it grows and flourishes.

Male and female can be distinguished among these parasites, the females being larger and more numerous than the males. The males grow to the length of .3937 inch, and the female is on an average half as long again. They can be seen with the naked eye. This animal has neither breathing apparatus nor circulatory system, and varies in color from grayish white to brown and even blood red, according to the condition of the person in whom it is found. The female lays a number of eggs in the human intestines, from which they spread the disease infinitely under proper conditions. The parasite and the egg develop best in a temperature between 65 and 85 degrees Fahrenheit. The air and surrounding medium should be moist. It is on account of the moisture and heat to be found in mines and tunnels that this parasite develops so perfectly among the toilers in these places. Darkness is also necessary, sunlight killing these animalcules almost instantly.

Ankylostomiasis originated in the Orient. It has been long established in Egypt, but has been mistakenly called Egyptian chlorosis, or anemia, and was treated as mere poverty of the blood in red corpuscles. It passed over from Egypt to Italy, where it was not really understood until Dubini found the parasite in 1838.

When the St. Gothard tunnel was built, in the '70's, the disease spread throughout central Europe, especially in Switzerland. The further spreading of the ankylostoma to the mines of Europe was quick to follow. When the men were first attacked in the St. Gothard tunnel it was thought that a new disease, the "tunnel disease," had been found, but it was nothing other than the ankylostoma, as was proved by Perroncito, when he found no less than 1500 of these parasites in the duodenum of a man who had died of "tunnel disease."

The mode of infection is very apparent. The men while at work often carry their hands to their mouths, or eat their food in the tunnels or mines, and in this way the parasite or its eggs enter through the mouth, pass into the system and find a permanent home in the intestines, to the walls of which they cling with all six teeth, feeding on the blood of the unfortunate person attacked.

## The Firm Did Not Die.

It is well to take an interest in your employer's business, but it is not well to presume on your worth. No man or boy is absolutely indispensable, although he may occupy a very exalted position.

A laughable instance is related about a young man who was a commercial traveler for a large wholesale house. He was clever and a hard worker, but exceedingly bumptious. A favorite opinion of his was that the firm could not get along without him. "I have no doubt," he said one day, "that if I should die the firm would have to put up the shutters within a year."

He had made the same remark several times before, but this time some envious clerk carried it to the ears of the firm.

The senior partner sent for him next day. "I understand, Mr. Smart," he said, gravely, "that you think that the firm would fall if you died."

Mr. Smart hemmed and hawed and tried to turn it off as a joke, but it wouldn't do. "It has worried me very much," continued the senior partner, "and so we have decided to try an experiment. Just consider yourself dead for a year, Mr. Smart, and if at the end of the year the firm feels itself dying we will send for you."

"But, sir—"

"That will do, Mr. Smart, you may go."

He went, a sadder and much wiser young man; and the firm did not die, after all.

## Berlin's Novel Trolley Cars.

A novel trolley car is in use in Berlin, Germany. Outside the city it runs on tracks with an overhead trolley contact just as the ordinary car. When the city limits are reached extra sets of trucks are lowered and the car becomes an electromobile omnibus propelled by storage batteries carried under the side seats of the car.

## The Lost Man.

There is never any hope for a man after his wife gets so she thinks she can pick out his clothes best for him.—New York Press.